



ederal Laboratories or, as they are commonly called, the National Labs can play an important role in an SBIR or STTR project. In this tutorial we will focus upon a subset of the Federal Labs referred to as **Federally Funded Research and Development Centers or FFRDCs**. While there are over 250 Federal Laboratories, there are only about 40 FFRDCs. The distinguishing feature of an FFRDC is that it is operated or managed by a contractor, rather than by the Federal government. For example, Pacific Northwest National Laboratory is an FFRDC owned and funded by the U.S. Department of Energy (DOE), but managed by Battelle Memorial Institute.

Let's consider how you might approach an FFRDC about participating in your firm's SBIR/STTR proposal. Let's assume that you don't have any contacts within any of the Federal labs. Where might you begin? Start by talking with your peers. Ask if any of them have had experience working with an FFRDC and if yes, ask for the name(s) of the specific researcher with whom they worked. If this approach doesn't yield any names, then contact the Federal Lab Consortium (FLC) and ask for help identifying an FFRDC that might be a good research institution (RI) or subcontractor on your project.

When contacting an FFRDC, there are several important things to keep in mind.

Illustrative list of FFRDCs and Agency affiliations

- » Center for Advanced Aviation System Development (DOT)
- » Frederick National Laboratory for Cancer Research (NIH)
- » Homeland Security Studies and Analysis Institute (DHS)
- » Jet Propulsion Laboratory (NASA)
- » Lawrence Berkeley National Laboratory (DOE)
- » National Defense Research Institute (DoD)
- » National Solar Observatory (NSF)
 - » First, whatever work they agree to do for you on an SBIR/STTR project, may be given secondary priority to their primary mission and responsibilities. However, you will more than likely be treated well; just realize that they are in business to serve the federal governments primary interests.
 - » Second, the amount of SBIR/STTR funding that you can subcontract to an FFRDC is not going to be a significant incentive to the Laboratory. Many FFRDCs have billion dollar annual budgets, so 30-60% of a \$150,000 Phase I project is not going to command much attention.





- » Third, there may be other reasons that an FFRDC may want to work with you on an SBIR/STTR project. It may give the Laboratory an opportunity to work with another agency or program in the Federal government to which they otherwise would not have access. Also, an FFRDC may have a policy that encourages its staff to work with industry and/or small entities. Working with you will then help advance this goal.
- » Finally, it will be easier to work with an FFRDC if it has previously served as a research institution or subcontractor on an SBIR or STTR proposal. With an experienced FFRDC, you will not be setting a new precedent or tilling new ground, so the contractual process should go faster. Prior experience also signals that the FFRDC will have a better grasp of the objectives, time frame, and desired outcomes of SBIR/STTR projects.

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COMMON MECHANISMS FOR WORKING WITH FFRDCS

Once you have found an FFRDC with which you want to work, you will need to discuss with the Laboratory what kind of arrangement is best for your situation. The following is a short list of the more common mechanisms that FFRDCs may use.

- » The first is a Cooperative Research and Development Agreement (CRADA), which is described by the Federal Lab Consortium as "a principal mechanism used by federal laboratories to engage in collaborative efforts with non-federal partners." The FLC states that CRADAs are a "relatively easy mechanism to implement," and agencies like the Department of Energy have modular CRADA agreements that can expedite creation and approval. The FLC claims that CRADAs are "intended to take into account the needs and desires of private industry when commercializing a product," so they will often be most appropriate for an FFRDC subcontracting to an SBIR/STTR applicant. Note that intellectual property and data rights will be shared between you and the FFRDC under a CRADA, subject to the terms of the agreement.
- » A second mechanism is a Work for Others (WFO) agreement. WFO is sometimes referred to as "sponsored research," and is defined as contracting with an FFRDC to perform specific work for your firm. You will pay their full cost, but you also will retain IP created by the FFRDC under a WFO.

- » A third mechanism is a User Facility agreement. As indicated earlier, some FFRDCs have unique facilities and equipment that can be made available to non-Federal parties like SBIR/STTR applicants. Like Work for Other agreements, you will pay the full cost of using such resources (including the cost of FFRDC staff to operate them), but you will retain intellectual property created. As an aside, if you agree to publish results of your work at the user facility, you may be given a reduced price.
- » A fourth mechanism is a Licensing agreement. This is a mechanism used for out-licensing intellectual property belonging to an FFRDC to another entity such as an SBIR/STTR applicant. The license may be included as part of a CRADA. Out-licensing is used in special "Technology Transfer Opportunities" sections of the DOE SBIR/STTR program.



» The 5th mechanism for working with an FFRDC is referred to as Technical Assistance (TA). Some FFRDCs can provide limited technical assistance at little or no cost to the recipient. Examples of TAs include solving a specific problem, or improving a process or product.

Your early communication with the FFRDC will provide you with considerable information that will assist you in making a decision as to whether or not you wish to include an FFRDC in your SBIR/STTR proposal. Rather than waiting until a proposal is released before initiating a relationship with an FFRDC, it may be useful to attend the annual Federal Lab Consortium conference where you can begin to network and develop relationships.